Federal Aviation Administration

Memorandum

Date: May 10, 2006

To: Manager, National Flight Procedures Office

From: Manager, Flight Procedure Standards Branch, AFS-420

Prepared by: Flight Procedure Standards Branch, AFS-420

Subject: Clarification to NOTICE 8260.56, Precision Category II/III Obstacle Assessment and Requirements, Paragraph 2.3.2(d)

PURPOSE. This memorandum provides criteria clarification concerning the calculation of CAT II/III parallel taxiway separation adjustment to account for airport elevation above sea level.

DISCUSSION. The intent of the paragraph is to provide a means for procedure specialists to calculate the adjustment to parallel taxiway separation standards based on airport elevation. It is consistent with AOSC Decision Document (DD #4) which mandates the distance be increased for airports above sea level. NOTICE 8260.56, paragraph 2.3.2(d), provides formulas consistent with the advisory circular, but these formulas need revisions as follow.

POLICY.

Paragraph 2.3.2(d) is corrected to read:

2.3.2 **d. Adjust the minimum taxiway separation** described above for airports above sea level as follows:

Determine the values of the following variables:

$$Y = 440 + (1.08S) - (0.024E)$$

$$B = 53 - 0.13S$$

$$C = B - (0.0022E)$$

$$X = C + (Y - R)/5) \text{ or } 150, \text{ whichever is lower}$$

$$Z_{SEA} = B + ((D - R)/5)$$

Where E = Threshold MSL elevation

R = Runway OFZ width/2

D = Minimum runway/taxiway separation for the Design Group

S = Wingspan of most restrictive aircraft (NOT SEMI-SPAN)

A = Adjusted minimum taxiway separation (round to nearest foot)

If $Z_{SEA} \leq X$

$A = D + 0.011E$

If $Z_{SEA} > X$

$A = Y + 6(Z_{SEA} - X)$

Example 1: Threshold elevation: 841 MSL

Aircraft Design Group: V (D = 500 IAW 2.3.2b)

Wingspan of most restrictive aircraft: 214

Runway OFZ = 400

Step 1 - determine values of variables

$Y = 440 + (1.08S) - (0.024E)$

$Y = 440 + (1.08 * 214) - (0.024 * 841)$

$Y = 440 + 231.12 - 20.184$

$Y = 650.936$

$B = 53 - 0.13S$

$B = 53 - 0.13 * 214$

$B = 25.18$

$C = B - (0.0022E)$

$C = 25.18 - (0.0022 * 841)$

$C = 23.3298$

$X = C + ((Y - R)/5)$ or 150, whichever is lower

$X = 23.3298 + ((650.936 - 200)/5)$

$X = 23.3298 + (90.188)$

$X = 113.5178$

Z_{SEA}= B + ((D - R)/5)

Z_{SEA}= 25.18 + ((500 - 200)/5)

Z_{SEA}= 25.18 + (60)

Z_{SEA}= 85.18

Step 2 - determine formula to apply

Z_{SEA} (85.18) ≤ X (113.5178)

A = D + 0.011E
A = 500 + 0.011 * 841
A = 509.25 (round up to 510)

Example 2: Threshold elevation: 5883 MSL

Aircraft Design Group: II (D = 400 IAW 2.3.2a)

Wingspan of most restrictive aircraft: 78

Step 1 - determine values of variables

Y = 440 + (1.08S) - (0.024E)

Y = 440 + (1.08 * 78) - (0.024 * 5883)

Y = 440 + 84.24 - 141.192

Y = 383.048

B = 53 - 0.13S

B = 53 - (0.13 * 78)

B = 53 - 10.14

B = 42.86

C = B - (0.0022E)

C = 42.86 - (0.0022 * 5883)

C = 42.86 - 12.9426

C = 29.9174

X = C + ((Y – R)/5) or 150, whichever is lower

X = 29.9174 + ((383.048 - 200)/5)

X = 29.9174 + (36.6096)

X = 66.527

Z_{SEA}= B + ((D - R)/5)

Z_{SEA} = 42.86 +((400-200/5)

Z_{SEA} = 42.86 +(40)

Z_{SEA} = 82.86

Step 2 - determine formula to apply

Z_{SEA} (82.86) > X (66.527)

$A = Y + 6(Z_{SEA} - X)$

A = 383.05 + 6(82.86 - 66.527)

A = 383.05 + 6(16.333)

A = 383.05 + 97.998

A = 481.048 (round to 482)